

CLAIMS

What is claimed is:

1. A method of forming a magnetic component, comprising:
providing a form of generally toric-section shape;
winding magnetic material on the form so as to form a magnetic member of generally toric-section shape
slicing the magnetic member such that it can be spread open at resulting cut ends thereof; and
removing the sliced magnetic member from the form.
2. The method of Claim 1, wherein the magnetic material includes one of magnetic wire and magnetic ribbon.
3. A method of making an inductive device, comprising:
providing a plurality of discrete magnetic components each formed as a toric section which is generally sector-shaped in plan view; and
fitting the plurality of magnetic components onto a generally toroidal electrical winding component.
4. A method according to Claim 3, wherein each said magnetic component has ends that can be spread apart to facilitate fitting of the magnetic component about the toroidal electrical winding component.

5. A method according to Claim 4, wherein said ends define a magnetic flux gap in a meridional plane of inductive device.

6. A method according to any one of Claims 3 to 5, wherein each said magnetic component comprises a bundle of magnetic wire or magnetic ribbon.

7. An inductive device, comprising:
an electrical winding component of generally toroidal shape; and
a plurality of discrete magnetic components, each formed as a toric section which is generally sector-shaped in plan view and at least partially embracing said electric winding component to complete a magnetic flux path in a meridional plane and further having end portions arranged to form at least one magnetic flux gap in the meridional plane.

8. The inductive device of Claim 7, wherein each said magnetic component includes one of magnetic wire and magnetic ribbon.

9. The inductive device of Claim 7, wherein each said magnetic component includes a bundle of magnetic wire or magnetic ribbon.

10. A magnetic component, comprising:
a member with magnetic material arranged in a generally toric-section shape such that the member can at least partially embrace an electrical winding of generally toroidal shape; and

a magnetic flux gap in a meridional plane of said member of magnetic material.

11. The magnetic component of Claim 10, wherein the magnetic material includes magnetic wire or magnetic ribbon.

12. The magnetic component of claim 10, wherein the member of magnetic material includes a bundle of magnetic wire or magnetic ribbon.

13. A method of making an inductive device, comprising:
providing a generally toroidal shaped electrical winding component;
winding a first length of magnetic wire at least partially around the electrical winding component in a first winding direction;
catching a looped portion of the first length of magnetic wire with a looped portion of a second length of magnetic wire;
winding the second length of magnetic wire at least partially around the electrical winding component in a second winding direction generally opposite to the first winding direction;
and repeating the foregoing steps for additional lengths of magnetic wire with the electrical winding component being rotated about an axis thereof.

14. The method of Claim 13, wherein the recited steps are repeated until the electrical component is substantially completely enveloped by magnetic wire.

15. The method of Claim 13 or 14, wherein the winding steps comprise hooking the magnetic wire and shifting the electrical winding component along its axis.

16. The method of Claim 15, wherein the winding steps are accomplished with no hook being passed through an inner opening of the electrical winding component.